Russian Journal of Applied Chemistry 2015 vol.88 N9, pages 1464-1471

Preparation of cerium oxalate from spent iron-potassium catalyst for dehydrogenation of isoamylenes into isoprene

Bikmurzin A., Lamberov A., Romanova R.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2015 Pleiades Publishing, Ltd. The cerium recovery in the oxalate form from spent iron-potassium catalyst for dehydrogenation of isoamylenes into isoprene was studied. The optimum conditions allowing preparation of the pure product with high degree of recovery were found. It was proved by X-ray diffraction, thermal gravimetric analysis, differential scanning calorimetry, and X-ray fluorescence analysis that the product obtained by the precipitation was cerium oxalate decahydrate containing no less than 98 wt % main substance.

http://dx.doi.org/10.1134/S107042721509013X